

METHOD AND APPARATUS FOR DYNAMIC BAD DISK SECTOR RECOVERY

ABSTRACT OF THE DISCLOSURE

[0036] An automatic process for recovering bad disk sectors by providing improved error handling and recovery of data, maintains disk data consistency, and relocates data structures from bad disk sectors. A bad-sector-mapping (BSM) table to correspond to a reserve sector space in the disk. In one embodiment, the BSM includes N entries for N reserved sectors in the bottom space of a disk. The content of each table entry contains two fields: a header and an address. There are three flag bits being defined in a head field, with each flag bit being used to specify status of how a bad sector occurred. The address field stores a disk offset for identifying the location of data stored in the disk. The last entry of the map table, or the last n+1 entry, is a checksum entry.